Access to Primary Care and ED use Among Veterans who Receive Primary Care at the VA

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Rationale: Provider access is an important part of the PACT model. Prior research has suggested that many Emergency Department (ED) visits and hospitalizations are potentially preventable and rates could be reduced if patients had better access to primary care providers.

Aims: Examine the relationship between booking density (measured as the proportion of a primary care provider's appointments that are not booked) and ED and hospital use.

Stage of Development: All data has been acquired and analysis files have been produced. VA-Medicare data (to measure ED use) was loaded onto a secure server in the Philadelphia VAMC in December 2011. These data are being incorporated into an analysis file measuring VA ED use and booking density built from national VA data sources.

Methods: We will conduct secondary analyses on existing data from various VA sources.
1. Evaluate and compare various ways to assess PCP availability using secondary data sources.
2. Define the cohort of patients who receive primary care at the VA.
3. Determine ED, urgent care, and nurse clinic use for this cohort.
4. Link each patient with a PCP.
5. Determine booking density (from Step 1) for each PCP.
6. Model ED use as a function of PCP availability, adjusting for various relevant covariates.

Results: The cohort of patients receiving primary care at the VA in 2008 and still alive on 1/1/09 was linked to a total of 8900 VA primary care providers. A booking density was calculated for each PCP for each week of 2009. The median booking density for all provider weeks was 0.90 (interquartile range: 0.77-1.00). Of the 4,101,226 patients in the cohort, 714,830 (17%) had at least one ED visit (VA or Fee Basis) in 2009.

Future Plans: Next steps include:
1. Incorporation of VA-Medicare data into current analysis file to more accurately measure ED use
2. Identify veterans who receive some outpatient care outside of the VA (via Medicare) for a sensitivity analysis
3. Test relationship between VA PCP booking density and ED use using multivariate regression techniques, adjusting for relevant covariates
4. Test the relationship between booking density and PACT implementation in VISN 4